

CLAIMS

1. A universal anchor for a vehicle, comprising:
 - 5 a magnet being fixedly secured to an anchor portion defining an opening;
 - 10 a flux deflector movably mounted to said anchor for movement in a range defined by a first position and a second position, said flux deflector effectively blocking said opening when said flux deflector is in said first position;
 - 15 a magnet fixedly secured to said anchor;
 - 20 a sensing switch configured to detect the magnetic field of said magnet, wherein said magnetic field is increased as said flux deflector moves from said first position towards said second position, said sensing switch providing a detectable signal when said magnetic field is increased.
 - 25 2. The universal anchor as in claim 1, wherein said sensing switch comprises a Hall effect device positioned to sense the magnetic field of said magnet.
 3. The universal anchor as in claim 1, wherein flux deflector is biased into said first position.
 4. The universal anchor as in claim 1, wherein said detectable signal being received by a controller of an airbag module and said controller suppresses the operation on an airbag module in response to said detectable signal received from said sensing switch.

5. The universal anchor as in claim 1, wherein flux deflector is biased into said first position, wherein said flux deflector must be moved from said first position to allow a hook to engage said anchor.
- 5 6. The universal anchor as in claim 5, wherein said sensing switch comprises a Hall effect device positioned to sense the magnetic field of said magnet.
7. The universal anchor as in claim 6, wherein said detectable 10 signal being received by a controller of an airbag module.
8. The universal anchor as in claim 1, wherein said flux deflector effectively blocks said opening when said flux deflector is in said first position and movement of said flux deflector from said first position is detected by said 15 sensing switch.
9. The universal anchor as in claim 8, wherein said flux deflector further comprises an actuating end and a flux deflection end, wherein said actuating end travels in a first direction and said flux deflection end travels in a 20 second direction when said flux deflector moves from said first position, said first direction being opposite to said second direction.
10. The universal anchor as in claim 9, wherein said actuating end further comprises a channel portion. 25
11. The universal anchor as in claim 9, wherein said actuating end and said flux deflection end are each configured to have a periphery larger than a corresponding portion of said opening being blocked by said flux deflector.

12. The universal anchor as in claim 8, wherein said flux deflector further comprises an actuating end and a flux deflection end, wherein said actuating end travels in a first direction and said flux deflection end travels in a second direction when said flux deflector moves from said first position, said 5 flux deflector being biased into said first position.

13. The universal anchor as in claim 12, further comprising a stopping member for making contact with said actuating end when said flux deflector is in said first position.

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14. The universal anchor as in claim 13, wherein said actuating end further comprises a channel portion.

15. The universal anchor as in claim 12, wherein said actuating end and said flux deflection end are each configured to have a periphery larger than a corresponding portion of said opening being blocked by said flux deflector.

16. A method for determining whether a securement member of a child seat is secured to a universal anchor of a vehicle, comprising:
20 positioning a detecting device on the universal anchor, said detecting device comprising a flux deflector which effectively blocks an opening of the anchor when it is in a first position; and
providing a signal to a controller when said flux deflector is moved from said first position, wherein the movement of said flux deflector is 25 caused by engaging a securement member on the anchor and said movement of said flux deflector allows a magnetic field of a magnet to increase.

17. The method as in claim 16, wherein said detecting device further comprises a sensing assembly positioned to provide said signal when said magnetic field of said magnet increases.

5 18. The method as in claim 17, wherein said sensing assembly further comprises a Hall effect device and related circuitry and said controller suppresses the operation on an airbag module in response to said signal received from said sensing assembly.

10 19. A detection device for a universal anchor of a vehicle, comprising:

a movable member being movably mounted within an opening defined by the anchor, said movable member being capable of movement within a range defined by a first position and a second position, wherein the opening is 15 effectively blocked by said movable member when said movable member is in said first position, said movable member further comprising an actuating end and a detection end;

20 a magnet disposed on said detection end of said movable member;

20 a sensing device for detecting the magnetic field of said magnet, wherein said sensing device provides a signal indicative of the position of said movable member.

25 20. The detection device as in claim 19, wherein said sensing device comprises a Hall effect device positioned to sense the magnetic field of said magnet.

21. The detection device as in claim 19, wherein movable member is biased into said first position.

22. The detection device as in claim 19, wherein said signal is received by a controller of an airbag module.

5 23. The detection device as in claim 19, wherein said movable member is biased into said first position, and said movable member must be moved from said first position to allow a hook to engage said anchor.

10 24. The detection device as in claim 19, wherein said actuating end travels in a first direction and said detection end travels in a second direction when said movable member moves from said first position, said first direction being opposite to said second direction.

15 25. The detection device as in claim 24, wherein said actuating end further comprises a channel portion.

20 26. The detection device as in claim 19, wherein said actuating end and said detection end are each configured to have a periphery larger than a corresponding portion of said opening being blocked by said movable member.

27. The detection device as in claim 23, further comprising a stopping member for making contact with said actuating end when said movable member is in said first position.

25 28. The detection device as in claim 24, further comprising a stopping member for making contact with said actuating end when said movable member is in said first position.